

# MEDSCI NZ PROGRAMME 2017

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## CONFERENCE MANAGERS



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## MedSci 2017 Programme at a glance

### Monday 4<sup>th</sup> September 2017

6.00 pm – 6.15 pm	Opening: Peter Shepherd, Queenstown Research Week Chair
6.15 pm – 7.00 pm	Queenstown Research Week Plenary Lecture: <b>Nobel laureate Professor Bruce Beutler, University of Texas, USA, 'How we sense infection'</b>
7.00 pm – 9.00 pm	QRW Social

### Tuesday 5<sup>th</sup> September 2017 – Societies Day

9.00 am – 10.00 am	MedSci Plenary Lecture: <b>Professor Joseph Takahashi, University of Texas, USA, 'Circadian clocks in health and disease'</b>		
10.00 am – 10.30 am	Morning Tea		
10.30 am – 12.30 pm	Session 1A: <b>PSNZ Bullivant Prize Finalists</b>	Session 1B: <b>NZSE Nancy Sirett Lecture and Student Oral Award Finalists</b>	Session 1C <b>IBTec Student Oral Award Finalists and Free Communications</b>
12.30 pm – 1.30 pm	Lunch and separate PSNZ and NZSE AGM's		
1.30 pm – 3.30 pm	Session 2A: <b>PSNZ Bullivant Prize Finalists (continued) PSNZ Hubbard Prize Finalists</b>	Session 2B: <b>Free Communications</b>	
3.30 pm – 4.00 pm	Afternoon Tea		
4.00 pm – 6.00 pm	Session 3A: <b>Free Communications and PSNZ Triennial Medal Presentation/Award</b>	Session 3B: <b>Infoblitz Presentations and Free Communications</b>	
6.00 pm – 8.00 pm	Combined MedSci, QMB, AWCBR Poster Session + Mixer		
8.00 pm –	Fashionomics		

### Wednesday 6<sup>th</sup> September 2017 – Symposia Day

9.00 am – 10.00 am	MedSci Plenary Lecture: <b>Professor Ken Ho, University of Queensland, Australia, 'Growth hormone and sports: detecting the doped or duped'</b>		
10.00 am – 10.30 am	Morning Tea		
10.30 am – 12.30 pm	Symposium 1A (PSNZ): <b>Vascular dysfunction in diabetes</b>	Symposium 1B (CNE): <b>Circadian clocks in health and disease</b>	
12.30 pm – 1.30 pm	Lunch and MedSci AGM		
1.30 pm – 3.30 pm	Symposium 2A (PSNZ): <b>MicroRNAs in cardiovascular health and disease</b>	Symposium 2B (IBTec) <b>Respiratory diagnostics and therapies</b>	
3.30 pm – 4.00 pm	Afternoon Tea		
4.00 pm – 6.00 pm	Symposium 3A (ABI) <b>The heart in health and in failure</b>	Symposium 3B (NZSE): <b>Growth hormone actions in health and disease</b>	
6.00 pm	Closing		
7.00 pm	MedSci Dinner + Prize-giving (Prime Restaurant)		

**Monday 4<sup>th</sup> September 2017  
QRW Opening Night Speaker**

6.00 pm - 6.15 pm	<p align="center"><b>Opening</b></p> <p align="center"><b>Peter Shepherd, Queenstown Research Week Chair</b></p> <p align="center">Queenstown Room, Level 5, Rydges Hotel</p>
6.15 pm - 7.00 pm	<p align="center"><b>Queenstown Research Week Plenary Lecture</b></p> <p align="center"><b>Professor Bruce Beutler (Nobel Laureate), University of Texas, USA</b></p> <p align="center"><i>sponsored by University of Otago</i></p> <p align="center">Queenstown Room, Level 5, Rydges Hotel</p> <p align="center"><b>Chair: Peter Shepherd</b></p>
7.00 pm - 9.00 pm	<p align="center"><b>Queenstown Research Week Welcome Function</b></p> <p align="center">Trades Area, Level 4, Rydges Hotel</p>

6.00 pm – 6.15 pm	Opening: Peter Shepherd, Queenstown Research Week Chair
6.15 pm – 7.00 pm	QRW Lecture: <b>Professor Bruce Beutler</b> 'How we sense infection' <i>sponsored by University of Otago</i>
7.00 pm – 9.00 pm	QRW Social

**Tuesday 5<sup>th</sup> September 2017**  
**MedSci Plenary Lecture, Societies' Free Communications, and**  
**MedSci/QMB/AWCBR Poster Session**

**MedSci Plenary Lecture**

9.00 am - 10.00 am	<b>Joseph Takahashi, The University of Texas, USA</b> Circadian clocks in health and disease Queenstown Room, Level 5, Rydges Hotel Chair: Alexander Tups
10.00 am - 10.30 am	<b>Morning Tea: Trade Exhibition Area, Level 4</b>

**Societies' Presentations**

10.30 am - 12.30 am	Session 1A: <b>PSNZ Bullivant Prize Finalists</b> Clancy's Room, Level 5 Chairs: Kim Mellor, Carolyn Barrett	Session 1B: <b>NZSE Nancy Sirett Lecture and Student Oral Award Finalists</b> <i>(sponsored by Medi'Ray)</i> QT 1, Level 4, Rooftop Chair: Greg Anderson	Session 1C <b>IBTec Student Oral Award Finalists and Free Communications</b> QT 2, Level 4, Rooftop Chair: Andrew Lowe
10.30 am - 10.45 am	<b>1A.1 Bullivant Prize Contestant 1: Jan-peter Baldin, University of Otago</b> The $\beta$ - and $\gamma$ -subunit of ENaC play a modulatory role in shear force sensation	<b>1B.1 Nancy Sirett Lecture: Dr Chris McMahon, ManukaMed, Ruakura, NZ</b> Muscle, meat, marbling and medicine: the growth axis in livestock and biomedicine	<b>1C.1 IBTec Prize Contestant 1: Dalya Al-Mohamadamin, Auckland University of Technology</b> Novel method of recording keratometry reading by using slit scanning
10.45 am - 11.00 am	<b>1A.2 Bullivant Prize Contestant 2: Daniel Barth, University Of Otago</b> Shear force sensation of the epithelial sodium channel is facilitated via a connection to the extracellular matrix		<del>1C.2 IBTec Prize Contestant 2: Andries Meintjes, Auckland University of Technology</del> <del>Heart sound segmentation metrics and features</del> <del>1C.2 IBTec Prize Contestant 2: David Berke, Budapest University of Technology and Economics</del> <del>Fluid loss based refreshment point positioning in running competitions</del>
11.00 am - 11.15 am	<b>1A.3 Bullivant Prize Contestant 3: Akash Deep Chakraborty, University of Otago</b> Arrhythmogenic ATP based kinase inhibitors directly increase the activity of RyR2		<b>1C.3 IBTec Prize Contestant 3: Jaishankar Bharatharaj, Auckland University of Technology</b> Parrot-inspired therapeutic robot to improve learning and social interaction of children with autism spectrum disorder
11.15 am - 11.30 am	<b>1A.4 Bullivant Prize Contestant 4: Adam Denny, University of Otago</b> Is high-density lipoprotein-based therapy an option for the treatment of muscle damage in Facioscapulohumeral Muscular Dystrophy?		<b>1C.4 IBTec Prize Contestant 4: Sandra Grau Bartual, Auckland University of Technology</b> Calu-3 cell model to investigate the effect of the positive pressure on the airway surface liquid layer water content
11.30 am - 11.45 am	<b>1A.5 Bullivant Prize Contestant 5: Obialunma Ebenebe, University Of Otago</b>	<b>1B.2 NZSE Prize Contestant 1: Man Lu, University of Auckland</b> Discovery and development of small molecule antagonists	<del>1C.5 IBTec Prize Contestant 5: Andries Meintjes, Auckland University of Technology</del> <del>Heart sound segmentation metrics and features</del> <del>1C.5 David Berke,</del>

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	The role of CaMKII in atherosclerotic plaque calcification in the ApoE-null mouse	inhibiting the growth hormone receptor	<a href="#">Budapest University of Technology and Economics</a> <a href="#">Fluid loss based refreshment point positioning in running competitions</a>
11.45 am - 12.00 pm	<b>1A.6 Bullivant Prize Contestant 6: Jason Lew, University of Otago</b> High-intensity interval exercise attenuates cardiac dysfunction and restores cardiac microRNA-126/SPRED-1/VEGF pathway in type-2 diabetic mice	<b>1B.3 NZSE Prize Contestant 2: Bo Sun, University Of Auckland</b> Melanocortin hormones regulate C57BL/6 mouse gut microbiota	<b>1C.6 Bianca Maceo-Heilman, University Of Auckland</b> Effects of inhibition of the lens microcirculation on the optical properties of bovine lenses assessed by laser ray tracing
12.00 pm - 12.15 pm	<b>1A.7 Bullivant Prize Contestant 7: Victoria King, University of Auckland</b> Effect of chronic inflammation on circadian rhythms in the preterm fetus	<b>1B.4 NZSE Prize Contestant 3: Kirsten Carter, University Of Otago</b> Prolactin-induced suppression of acute running wheel activity in female mice	<b>1C.7 Makhdoom Sarwar, University Of Otago</b> The cell-environment handshake: An interaction that regulates gene expression
12.15 pm - 12.30 pm	<b>1A.8 Bullivant Prize Contestant 8: Aline Loehfelm, University of Otago</b> Effects of fatty acids on neuronal morphology and function – implications for Alzheimer’s disease	<b>1B.5 NZSE Prize Contestant 4: Lekha Jain, University of Auckland</b> Genetic variation in genes of the GH/IGF-1 axis in human development and disease	<b>1C.8 n/a</b>
12.30 pm	<b>PSNZ AGM – Clancy’s Room</b>	<b>NZSE AGM – QT 2, Level 4 Rooftop</b>	
12.30 pm - 1.30 pm	<b>Lunch: Trade Exhibition Area, Level 4, Rydges Hotel</b>		
<b>Societies’ Presentations</b>			
<b>1.30 pm - 3.30 pm</b>	Session 2A <b>PSNZ Bullivant Prize Finalists (continued)</b> <b>PSNZ Hubbard Prize Finalists</b> <b>Clancys Room, Level 5</b> <b>Chairs: Colin Brown, David Crossman</b>	Session 2B <b>Free Communications</b> <b>QT 1, Level 4, Rooftop</b> <b>Chairs: Guy Warman, Clare Reynolds</b>	
1.30 pm - 1.45 pm	<b>2A.1 Bullivant Prize Contestant 9: Sama Mugloo, University Of Otago</b> Hypertension is associated with increased ENaC expression in the arteries of Cyp1a1-Ren2 rats	<b>2B.1 Alisa Boucsein, University Of Otago</b> Circadian rhythmicity of leptin sensitivity in the hypothalamus	
1.45 pm - 2.00 pm	<b>2A.2 Bullivant Prize Contestant 10: Joshua Neale, University Of Otago</b> Ghrelin deletion impairs postischaemic revascularisation	<b>2B.2 Alma Orts-Sebastian, University Of Auckland</b> The effect of general anaesthesia on circadian rhythms in mice	
2.00 pm - 2.15 pm	<b>2A.3 Hubbard Prize Contestant 1: Mauro Batista da Silva, University Of Otago</b> Dissecting the functional relevance and ontogeny of altered GABAergic circuitry in polycystic ovary syndrome (PCOS)	<b>2B.3 Jia Zhao, University Of Auckland</b> High doses of Isoflurane reduce survival in aged <i>Drosophila melanogaster</i>	
2.15 pm - 2.30 pm		<b>2B.4 Raewyn Poulsen, University Of Auckland</b> NMDA receptor subunit switch disrupts the chondrocyte-intrinsic circadian clock in osteoarthritis and causes disease-associated changes in chondrocyte phenotype	
2.30 pm - 2.45 pm	<b>2A.4 Hubbard Prize Contestant 2: Lorna Daniels, University Of Otago</b> The role of calcium calmodulin dependent protein kinase II in type 2 diabetic cardiac dysfunction	<b>2B.5 David Crossman, University Of Auckland</b> T-tubule remodelling: a cellular pathology driven by both sides of the plasmalemma?	
2.45 pm - 3.00 pm		<b>2B.6 Michelle Munro, University Of Otago</b> Prenatal formation of early t-tubules in the sheep heart	
3.00 pm - 3.15 pm	<b>2A.5 Hubbard Prize Contestant 3: Alex Wilson, University of Auckland</b>	<b>2B.7 Joanne Harrison, University Of Otago</b>	

	The structure-function relationship in cardiac remodelling	Organic carbon monoxide releasing molecules as cardioprotective agents
3.15 pm - 3.30 pm		<b>2B.8 Lisa Martin, Monash University, Australia</b> The molecular origins of amyloidogenic peptides
<b>3.30 pm - 4.00 pm</b>	<b>Coffee Break: Trade Exhibition Area, Level 4, Rydges Hotel</b>	
<b>Societies' Presentations</b>		
<b>4.00 pm - 6.00 pm</b>	Session 3A <b>Free Communications and PSNZ Triennial Medal</b> Clancys Room, Level 5 Chair: Paul Donaldson, Michelle Munro	Session 3B <b>Infoblitz Presentations and Free Communications</b> QT 1, Level 4, Rooftop Chair: Rohit Ramchandra, David Mellis
4.00 pm - 4.15 pm	<b>3A.1 Qishan Zhou, University Of Auckland</b> The role of connexin and pannexin hemichannels and purinergic receptors in perinatal ischemic brain injury	<b>Infoblitz Presentations</b> <b>3B.1 Mathilda Plate, University Of Otago</b> Does the neuropeptide RFamide related peptide-3 act on GnRH neurons to inhibit reproductive activity? <b>3B.2 Caroline Focke, University Of Otago</b> Revealing the circadian patterns of CRH neuron excitability in freely behaving mice <b>3B.3 Jessica Calverley, University Of Otago</b> Determining the physiological importance of CaMKII in alpha-adrenergic regulation of heart function in mice <b>3B.4 Isabelle Van Hout, University Of Otago</b> Alterations in calcium handling proteins in diabetic and non-diabetic patients with or without post-operative atrial fibrillation
4.15 pm - 4.30 pm	<b>3A.2 Hyeon Tae (Kenta) Cho, University Of Auckland</b> The TLR7 agonist Gardiquimod protects oligodendrocytes from damage after asphyxia in the preterm fetal sheep	<b>3B.5 Bradley Jamieson, University Of Otago</b> Vasopressinergic control of RP3V kisspeptin neurons <b>3B.6 Rebecka Raymond, University Of Otago</b> The role of arcuate nucleus kisspeptin neurons in female fertility and LH pulse generation <b>3B.7 Alexander Wong, University Of Otago</b> The effect of protein kinase C on the ryanodine receptor <b>3B.8 Ellen Grengard, University Of Otago</b> Hypothalamic control of stress and anxiety responses: role of CRH neurons and neuropeptide RFamide related peptide-3
4.30 pm - 4.45 pm	<b>3A.3 Yonis Abukar, University Of Auckland</b> Altered neural control in a microembolisation induced model of left ventricle dysfunction	<b>3B.9 Denis Loiselle, University of Auckland</b> The ineluctable constraints of thermodynamics in the aetiology of obesity
4.45 pm - 5.00 pm	<b>3A.4 Jenny Clarkson, University Of Otago</b> The role of arcuate nucleus kisspeptin neurons in the generation of luteinising hormone pulses	<b>3B.10 Aram Ahmed Babakr, University Of Otago</b> Does epicardial adipose tissue make the human heart more susceptible to atrial fibrillation?
5.00 pm - 5.15 pm	<b>3A.5 Triennial Medal Award and Presentation</b> <b>Colin Brown, University of Otago</b> Stating the obvious? Vasopressin neurons contribute to increased blood pressure during the development of hypertension	<b>3B.11 Jiao Guo Guangdong Pharmaceutical University, Guangzhou, China</b> Liver-adipose tissue crosstalk as a key player in the pathogenesis of glycolipid metabolic disease and potential target of Chinese medicine
5.15 pm - 5.30 pm		<b>3B.12 Kim Mellor, University of Auckland</b> Diabetic cardiomyopathy is characterised by diastolic dysfunction linked with disturbances in cardiomyocyte glucose handling and AMPK signalling.
5.30 pm - 6.00 pm		<b>3B.13 Nima Purvis, University Of Otago</b> The pathophysiological role of microRNAs in diabetic cardiac stem cells <b>3B.14 Carol Bussey, University Of Otago</b>

		Increased right cardiac sympathetic and parasympathetic nerve activity in type 2 Diabetes
6.00 pm – 8.00 pm	<b>Combined MedSci, QMB, AWCBR Poster Session + Mixer</b> <b>Trades Area, Level 4, Rydges Hotel</b> <b>Level 5 Foyer, Rydges Hotel</b> <b>QT 2 and QT 3, Level 4, Rooftop</b>	
<b>NZSE Posters</b>		
M1	<b>Eulalia Coutinho, University Of Otago.</b> Activation of arcuate neuropeptide Y neurons alters luteinising hormone secretion in mice	
M2	<b>Maggie Evans, University Of Otago.</b> Leptin receptor signalling in midbrain dopamine neurons suppresses physical activity in mice	
M3	<b>Yue Wang, University of Auckland.</b> Inhibition of growth hormone receptor signal transduction in a panel of cancer cell lines	
M4	<b>Savana Woodcock, University Of Otago.</b> Mitochondrial DNA content in oocytes from transgenic AMH over-expressing mice	
<b>IBTec Posters</b>		
M5	<b>Gautam Anand, Institute of Biomedical Technologies, Auckland University of Technology.</b> Multi-frequency bioimpedance variations to estimate changes in arterial diameter	
M6	<b>Anubha Kalra, Institute of Biomedical Technologies, Auckland University of Technology.</b> Elimination of skin-stretch induced motion artefacts from electrocardiogram signals	
M7	<b>K L T Roos, Institute of Biomedical Technologies, Auckland University of Technology.</b> Superimposed pressure oscillations (SIPO) and their effects on acute and chronic asthmatic models	
<b>ABI Posters</b>		
M8	<b>WITHDRAWN</b>	
M9	<b>Rachel Smith, University of Auckland.</b> An optimized computational framework for estimating 3D atrial fibre orientations from contrast enhanced images	
M10	<b>Renee, Miller, University of Auckland.</b> Non-invasive measurement of isotropic myocardial stiffness in a hypertensive pig from MRE-measured displacements	
M11	<b>Daniel Addo, University Of Auckland.</b> In silico simulation of the arterial spin labelling magnetic resonance imaging technique within the porcine pulmonary circulation	
<b>MedSci Posters</b>		
M12	<b>Rachael Augustine, University Of Otago.</b> Paraventricular nucleus kisspeptin fibres originate from kisspeptin cell bodies located in the periventricular nucleus	
M13	<b>George Connolly, University Of Otago.</b> Using DREADDs to elucidate the role of AgRP neurons in the control of reproduction	
M14	<b>Elodie Desroziers, University Of Otago.</b> Deciphering the role of arcuate GABA neurons in fertility regulation with chemogenetic tools in vivo	
M15	<b>Papillon Gustafson, University Of Otago.</b> Regulation of the maternal hypothalamic-pituitary-adrenal axis by prolactin.	
M16	<b>Mohinder Kaplish, University Of Otago.</b> The effect of pregnancy-induced adaptations on glucagon like-peptide-1 receptor activation-induced stabilisation of beta-catenin in hypothalamic neurons in female rats	
M17	<b>Zin Khant Aung, Centre For Neuroendocrinology, University Of Otago.</b> Pregnancy-induced adaptations in glucose homeostasis in the mouse requires prolactin receptor expression in the pancreas but not the brain	
M18	<b>Mohammed Rizwan, University Of Otago.</b> Stabilization of beta-catenin in mouse hypothalamic cell lines	
M19	<b>Alexander Seymour, University Of Otago.</b> TRPV regulation of magnocellular neurosecretory cell activity in lactation	
<b>Physiological Society of New Zealand Posters (*PSNZ Student Poster Presentation Prize candidate)</b>		
M20	<b>Caroline Ancel, University Of Otago.</b> Deletion of protein tyrosine phosphatase 1B from forebrain neurons does not prevent the onset of diet-induced infertility in female mice	
M21	<b>Emily Brown, University Of Otago.</b> TRPV1 expression in the supraoptic nucleus of pregnant rats	
M22	<b>Sarah Holland, Otago University.</b> Investigating the role of microglia in polycystic ovary syndrome (PCOS)	
M23	<b>India Sawyer University Of Otago.</b> The role of RFRP neurons in murine puberty onset and anxiety	
M24	<b>Nathan Skinner, University Of Otago.</b> Effect of circadian rhythms on leptin and insulin sensitivity	

M25	<b>Nima Afshar, University Of Auckland.</b> Bond graph modelling of glucose uptake in small intestine using CellML
M26	<b>Hamish Aitken-buck, University Of Otago.</b> Myoregulin has no effect on contraction or relaxation of isolated rat hearts
M27	<b>Ethan Cain, University Of Otago.</b> Is hyperuricemia a regulator of the mTOR complex in pancreatic $\beta$ -cells?
M28	<b>Dhananjie Chandrasekera, University Of Otago.</b> Understanding the pro-apoptotic role of microRNA-532 in the diabetic heart
M29	<b>Sherina Hollan, Massey University.</b> Soluble factors released by MDA-MB-231 breast cancer cells delay neutrophil apoptosis in vitro
M30	<b>Rachael Redado Iremonger, University Of Otago.</b> The role of beta blockers in cardiac structural remodelling
M31	<b>Kevin Jagau, University Of Otago.</b> Changes in expression of CaMKII isoforms in ApoE <sup>-/-</sup> mouse aorta
M32	<b>Timothy Louis Molloy Jones, University of Auckland.</b> Arrhythmic activity and reduced cardiomyocyte contractility in right ventricular hypertrophy
M33	<b>Fenja Knoepp, Excellence Cluster Cardio-pulmonary System, Justus Liebig University, Giessen, Germany.</b> Hypoxia inhibits voltage gated K <sup>+</sup> -channels in pulmonary arterial smooth muscle cells by mitochondrial complex IV isoform 2 triggered release of reactive oxygen species
M34	<b>*Shalini Kumar, University Of Otago.</b> Prolactin effects on kisspeptin fibre expression in the paraventricular and supraoptic nucleus of the mouse
M35	<b>Pinky Lal, University of Otago.</b> Investigating the role of epithelial sodium channel (ENaC) as a shear stress sensor in endothelial cells.
M36	<b>Scott Lee, University Of Otago.</b> Optimisation of hanging drop technique for in vitro differentiation of mouse embryonic stem cells into cardiomyocytes
M37	<b>Ryan McQuaig, University of Otago.</b> Synergistic paracrine effects of cardiac progenitor cells from the right atrium and left ventricle on in vitro cultured cardiovascular cells
M38	<b>Khanh Nguyen, University Of Otago.</b> Identification of transporters involved in drug-drug interaction during gout treatment in primary rat hepatocytes
M39	<b>*Sajida Parveen, University Of Otago.</b> Understanding altered heart rate generation in type 2 diabetes
M40	<b>Mel Prescott, Otago University.</b> Finding CLARITY: Visualising the gonadotrophin-releasing hormone neuron
M41	<b>Samir Samman, University Of Otago.</b> Long-term effects of exercise on zinc homeostasis
M42	<b>*Eugene Eng Leng Saw, University Of Otago.</b> Downregulation of non-neuronal cholinergic system (NNCS) reduces glucose transporter in the diabetic heart
M43	<b>Shervarn Sita, University Of Otago.</b> Does hyperuricemia control ubiquitination of p53 via OGT in cancer?
M44	<b>*Pratik Thakkar, University Of Auckland.</b> Is treating the transient post-stroke hypertension after ischemic stroke beneficial? A Wistar rat model study.
M45	<b>Luke Worthington, University Of Otago.</b> CaMKII inhibition reduces foam cell lesion development in the brachiocephalic artery of apolipoprotein E knockout mice
M46	<b>Venkata Satthenapalli, University Of Otago.</b> Ventricle-specific cardiomyocyte differentiation of mouse embryonic stem cells
M47	<b>*Joshua Chang, University of Auckland.</b> Differential regulation of cerebral and renal blood flow by the carotid body in health and hypertension
M48	<b>*Dylan Pen, University Of Auckland.</b> Aortic chemoreceptor stimulation increases coronary blood flow in the conscious sheep
M49	<b>Xiang Fu, Institute of Biomedical Technologies, Auckland University of Technology.</b> Stretchable sensors based on CNTs/PDMS composites capable of detecting tension and pressure
8.00 pm –	<b>Fashionomics</b> <i>Sponsored by Thermo Fisher Scientific</i> <b>Trades Area, Level 4, Rydges Hotel</b> <b>(with drinks)</b>

**Wednesday 6th September 2017**  
**MedSci Plenary Lecture and Societies' Symposia**

**MedSci Plenary Lecture**

9.00 am - 10.00 am	<b>Ken Ho, University of Queensland, Australia</b> Growth hormone and sports: detecting the doped or duped Queenstown Room, Level 5 Chair: Greg Anderson
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10.00 am - 10.30 am	<b>Morning Tea: Trade Exhibition Area, Ground Floor</b>
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**Societies' Symposia**

10.30 am - 12.30 pm	Symposium 1A (PSNZ): <b>Vascular dysfunction in diabetes</b> QT 1, Level 4, Rooftop Chair: Carol Bussey, Zoe Ashley	Symposium 1B (CNE): <b>Circadian clocks in health and disease</b> Queenstown Room & Wakatipu Room, Level 5 Chairs: Alexander Tups, Richard Piet	
10.30 am - 11.00 am	<b>S1A.1 Michelle Keske, Deakin University, Australia</b> Impaired microcirculation and insulin resistance	<b>S1B.1 Guy Warman, University of Auckland, NZ</b> The effect of general anaesthesia on sleep and the circadian clock	
11.00 am - 11.30 am	<b>S1A.2 Zoe Ashley, University of Otago, NZ</b> The role of vascular ENaC in impaired flow-mediated responses of carotid arteries in diabetes	<b>S1B.2 Oliver Rawashdeh, University of Queensland, Australia</b> The role of PERIOD1 within the central circadian clock network: when evolution lags behind.	
11.30 am - 12.00 pm	<b>S1A.3 Andrew Salmon, University of Bristol / Waitemata District Health Board</b> Endothelial glycocalyx – critical roles in vascular dysfunction in diabetes	<b>S1B.3 Alexander Tups, University of Otago, NZ</b> Does it matter at what time of day we eat?	
12.00 pm - 12.30 pm	<b>S1A.4 Rajesh Katare, University of Otago, NZ</b> Early downregulation of proangiogenic microRNAs leads to microangiopathy in diabetic heart	<b>S1B.4 Richard Piet, University of Otago, NZ</b> Regulation of the GnRH neuronal network by circadian output neuropeptides	
12.30 pm	<b>MedSci AGM – Queenstown Room</b>		

12.30 pm - 1.30 pm	<b>Lunch: Trade Exhibition Area, Level 4, Rydges Hotel</b>
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**Societies' Symposia**

1.30 pm - 3.30 pm	Symposium 2A (PSNZ): <b>MicroRNAs in cardiovascular health and disease</b> Clancys Room, Level 5 Chairs: Rajesh Katare, Anna Pilbrow	Symposium 2B (IBTec) <b>Respiratory Diagnostics and Therapies</b> QT 1, Level 4, Rooftop Chair: Andrew Lowe <i>sponsored by, Institute of Biomedical Technologies, Auckland University of Technology</i>	
1.30 pm - 2.00 pm	<b>S2A.1 Sean Coffey, University of Otago, NZ</b> microRNA based investigations into the biology of aortic valve stenosis	<b>S2B.1 Kim Prisk, University of California, USA</b> Quantifying Ventilation and Perfusion in the Human Lung with Contrast-Free Proton MRI	
2.00 pm - 2.30 pm	<b>S2A.2 Salvatore Pepe, University of Melbourne, Australia</b> MicroRNAs in cardiac homeostasis and injury	<b>S2B.2 Alastair Stewart, University of Melbourne, Australia</b> Casein Kinase 1δ/ε inhibitors: a new class of anti-asthma agents?	
2.30 pm - 3.00 pm	<b>S2A.3 Jennifer Gamble, Centenary Institute, Australia</b> An novel oligonucleotide-based drug targeting VE-Cadherin as a new therapy for inflammatory disease	<b>S2B.3 Suzanne Bell, Fisher and Paykel Healthcare, NZ</b> Clinical Usability Assessment – The Long Haul	

3.00 pm - 3.30 pm	<b>S2A.4 Anna Pilbrow, University of Otago, NZ</b> <i>Sponsored by Thermo Fisher Scientific</i> Using microRNAs to predict heart disease events in the general population	<b>S2B.4 Geoff Bold, Fisher and Paykel Healthcare, NZ</b> Sustainable Life Cycle Respiratory Product Development
3.30 pm - 4.00 pm	<b>Coffee Break: Trade Exhibition Area, Level 4</b>	
<b>Societies' Symposia</b>		
4.00pm- 6.00pm	Symposium 3A (ABI) <b>The heart in health and in failure</b> Clancys Room, Level 5 Chairs: June-Chiew Han, Kim Mellor	Symposium 3B (NZSE): <b>Growth hormone actions in health and disease</b> QT 1, Level 4, Rooftop Chairs: Jo Perry, Mark Vickers
4.00 pm - 4.30 pm	<b>S3A.1 Willem van der Laarse, VUmc Amsterdam</b> Oxygen use for work and other processes in hypertrophied papillary muscle	<b>S3B.1 Clare Reynolds, University of Auckland, NZ</b> Early life nutrition and the path to programmed obesity – can GH intervention make a difference?
4.30 pm - 5.00 pm	<b>S3A.2 Chris Baldi, University of Otago, NZ</b> The role of the myofilament in diabetic left ventricular dysfunction	<b>S3B.2 Ken Ho, University of Queensland, Australia</b> The function of growth hormone beyond growth
5.00 pm - 5.30 pm	<b>S3A.3 Andrew Taberner, University of Auckland, NZ</b> Cardiac myometry in health and disease	<b>S3B.3 Daniel Blackmore, University of Queensland, Australia</b> Physical exercise improves age-associated cognitive deficits in a Growth Hormone- dependent manner
5.30 pm - 6.00 pm	<b>S3A.4 June-Chiew Han, University of Auckland, NZ</b> Left-ventricular energetics: in diabetes, in hypertension	<b>S3B.4 Jo Perry, University of Auckland, NZ</b> Contribution of human growth hormone to cancer progression
7.00 pm	<b>MedSci Dinner and Prize-giving</b> Prime Restaurant	